

A NEW STAPELIA FROM THE WESTERN CAPE PROVINCE, SOUTH AFRICA

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(With Plates XVIII and XIX)

Stapelia choanantha Lavranos et Hall sp. nov. nullae aliae arctae affinis, quae forsitan sectionem propriam generis *Stapeliae* constituere debet.

Caules procumbentes vel pendentes, 10—30 cm. (tenuis 200 cm.) longi, 6—10 mm. (tenuis 12 mm.) diam., glabri, glaucovirides, juvenes brunnei maculati, quadranguli, angulis obtusis, haud dentatis; flores 2—6 e pedunculo cuspidato producti; pedicelli ca. 10 mm. longi, 1 mm. diam., teretes, glabri; sepala ovata-delloidea, acuta, sectione convexa, glabra, 3·5 mm. longa, basi 1·2 mm. lata; corolla campanulata, extus basi rosea, deinde rubropurpurea, glabra, intus fusca rubropurpurea, glabra, 18 mm. longa, 20 mm. diam. inter apices loborum; tubus infundibuliformis, sectione pentagonus, 16 mm. longus, ad orem 11 mm. diam.; lobi delloidei, acuti, 6 mm. longi, basi 7 mm. lati, patuli, supra velutini, marginibus leviter revolutis; corona exterior basi pentagona, 2·8 mm. diam., basi tubi corollae adpressa, basi albo-rosea, lobis 1·5 mm. supra basi coronae nascentibus, fere erectis, fuscis rubrobrunneis, intus profunde canaliculatis, 2·3 mm. longis, 1 mm. latis, ovatis, apice tridentibus, dentibus lateralibus subulatis, dente medio delloideo valde longioribus; coronae interioris lobi 5 mm. longi, bicornuti, cornis interioribus rubrobrunneis, 4·5 mm. longis, basi complanatis et supra antheras incombentibus, deinde teretibus, haud conniventibus, erectis, sensim attenuatis, leviter divergentibus, apice acutis, cornis dorsalibus 3·5 mm. longis, erectis, ad interiora similibus.

TYPE LOCALITY: Cape Province, Huis River Pass, approx. 5 miles West of Calitzdorp, alt. approx. 3,000 ft., coll. September, 1962, P. C. H. Salter, A. Möller and B. Ramsey, coll. December 1962 Hall 2579 (BOL. holotype) fl. Kirstenbosch, Nov. 1963.

DESCRIPTION

Stems procumbent or pendent, 10—30 cm. (up to 200 cm.) long, 6—10 mm. (up to 12 mm.) diam., glaucous green with brownish patches mainly on young growth, 4-angled, the angles rounded and without distinct teeth except on very young shoots.

Flowers 2—6 together, from a cuspidate peduncle arising from the groove between the stem angles, developed successively.

Bracts short, linear, scarious.

*Pedice*l ca. 10 mm. long, 1 mm. diam., terete, glabrous, pink.

Sepals narrowly ovate-deltoid, convex in section, 3.5 mm. long, 1.2 mm. broad at the base, glabrous.

Corolla campanulate, outside pink on lower half of tube, thereafter mottled with and finally uniformly reddish-purple, inside reddish-purple, glabrous throughout, 18 mm. long, 20 mm. diam. between apices of lobes; *tube* funnel-shaped, pentagonal in section, 16 mm. long, 11 mm. diam. at the mouth; *lobes* deltoid, acute, horizontally spreading, 6 mm. long, 7 mm. broad at the base, the margins somewhat revolute, the upper surface velvety.

Outer corona at base pentagonal, 2.8 mm. diam. and adpressed against the corollatube, light pink to the base of the lobes; lobes almost erect, arising at ca. 1.5 mm. from the base of the outer corona, dark red-brown, deeply canaliculate on the inner surface, 2.3 mm. long, 1 mm. broad with a 3-toothed apex, the middle tooth deltoid and much shorter than the subulate lateral teeth.

Inner corona lobes 5 mm. long, red-brown, two-horned; inner horns 4.5 mm. long, at first flattened and incumbent upon the anthers, thereafter erect, not connivent, terete and gradually tapering, their apices acute and somewhat divergent; dorsal horns 3.5 mm. long, erect, similar to the outer.

Follicles fusiform, up to 10 cm. long, glaucous green with purple-brown spots and a rather obtuse apex.

S. choanantha is an altogether remarkable species, both in its habit of growth and in its singular flowers. The long, funnel-shaped corolla-tube reminds one of *Huernia* but the corona clearly places it in the genus *Stapelia*. Even so, the corona of this new species is very different from all other members of that genus. The outer corona somewhat resembles that of *S. revoluta* Mass. from which, however, it differs in that the lobes are much longer than they are wide and in that they are deeply grooved on the upper surface. The inner corona lobes, with their two long, terete, erect horns, seem to differ from those of all other known species of *Stapelia*. *S. choanantha* is one more example of the great versatility met with in the Stapelieae. It does not appear to fit into any of the sections as enumerated by White and Sloane in *The Stapelieae* 411-428 (1937). It should be placed in a section by itself.

Our species was discovered in September, 1962, by Messrs. P. C. H. Salter, A. Möller and Bruce Ramsey on the upper, eastern slopes of the Huis River Pass, West of Calitzdorp in the Cape Province at an altitude of approx. 3,000 ft. in an area characterised by rather high summer temperatures and an annual rainfall of 250 mm. These three young naturalists observed several plants all of which were growing from extremely narrow ledges or crevices on the vertical and largely unscalable cliff face in a narrow, well-wooded ravine. The stems, up to two metres long, were quite pendent, the few lateral stems emitted



PLATE XVIII

Stapelia choanantha Lavranos et Hall in habitat, with Mr. Bruce Ramsey

Photo: Alfred Möller.



FIG. 1.



FIG. 2.



FIG. 3.

PLATE XIX

Stapelia choanantha Lavranos et Hall

FIG. 1. Natural size.

FIG. 2. app. $\times 2\frac{1}{2}$.

FIG. 3. app. $\times 2\frac{1}{2}$.

Photo: J. Lavranos.

irregularly from the older stems also hung parallel with them. The plants were not in flower and a second visit a year later by two of the original party was equally unsuccessful. A few days after their first visit Mr. Salter kindly brought a representative long stem to Kirstenbosch which immediately aroused Hall's interest and in December, 1962, Hall and Col. R. D. Bayliss, acting on brief directions from Salter, visited the same ravine where, at a lower altitude than the original specimens were seen, two small plants were found. Unlike the other these grew under small shrubs on a sloping cliff in shallow soil and debris, the many small stems all pendent and often subterranean, the nature of the surroundings preventing them from reaching a sheer cliff face. Material from these two plants was brought to Kirstenbosch where they flowered 10 months later, and it is on these that the present description is based.

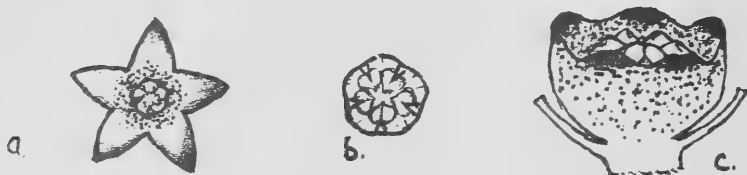
The type locality was re-visited by Hall and Bayliss in Dec. 1963 and they were joined there by Möller and Ramsey who had motored that morning from Mossel Bay to make certain they would see the original plants. These proved to be about 300 ft. higher up the ravine than the smaller plants' locality and further material was obtained with no little difficulty owing to their peculiar situation. One of the plants measured $6\frac{1}{2}$ ft. (see Plate XVIII). A second plant examined was more profusely branched with a maximum length of $4\frac{1}{2}$ ft., its stems stouter and more mottled, evidently younger and in better health. It was noted that, even at noon on that mid-summer's day, the vertical rays of the sun barely reached these plants. All the branches bore the scars of old flowering peduncles and these were confined to the first inch of growth since none have been observed over any other portions of the stems regardless of length. It would seem, therefore, that each stem flowers once only and does this in its earliest stages of growth. This is certainly borne out by the plants in cultivation at Kirstenbosch for more than a year, each new stem producing flowering peduncles before it is an inch in length, many of which, however, atrophy before they are fully developed. Furthermore, these new stems all curve noticeably downwards and soon become subterranean in conventional culture.

It is possible that these cliff dwellers with their very singular growth form are but aberrant specimens which have survived their seemingly precarious foothold on the sheer cliff faces, and have lived to a great age, though the long stems reveal little evidence to aid in calculating annual growth. Perhaps further exploration on the higher levels will reveal more conventional growth forms but the terrain in that area is largely very dense karroid scrub, *Portulacaria afra* (L.) Jacq. being dominant here. Many similar areas in this part of the country, with their impenetrable bush and steep cliffs, would oppose considerable difficulties to more thorough exploration.

The authors are much indebted to Messrs. P. C. H. Salter, A. Möller and Bruce Ramsey for drawing their attention to this singular species, for living

material and information regarding its mode of occurrence and its habitat. They furthermore wish to thank Mr. Möller and Mr. Ramsey for guiding H. Hall and Col. Bayliss to the higher levels where they made their original discovery. They finally express their appreciation to Mr. Möller for his permission to use the habitat photograph which appears herewith.

Echidnopsis seibarnica Lavranos.



a. Flower $\times 4$. — b. Corona $\times 8$. — c. Corona $\times 16$

Illustration of *Echidnopsis seibarnica* Lavranos to accompany article on "New Stapeliae from Southern Arabia" by J. Lavranos. (*Journ. S. Af. Bot.*, 30, 2, 88-91)